UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/859,661	05/17/2001	Stuart A. Fraser		3933

			EXAMINER
1473	7590	10/03/2003	MYHRE, JAMES W

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ART UNIT	PAPER NUMBER
3622	

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with th   correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____*3*____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Jun 17, 2003* _____ .

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-5, 7-23, and 31-37* _____ is/are pending in the application.

    4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-5, 7-23, and 31-37* _____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some* c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    *See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). ___*9*___

4) ☐ Interview Summary (PTO-413) Paper No(s). _____

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1.   The amendment filed on June 17, 2003 has been considered but is ineffective to overcome

the <u>McCausland et al</u> (5,243,331) and <u>Kramer</u> (5,038,284) references.

The above amendment added new Claims 34-37 and amended Claims 1, 2, 4, 5, 7, 16, 21,

31, 32, and 33. Claims 6 and 24-30 were previously canceled. Thus, the currently pending claims

are Claims 1-5, 7-23, and 31-37.

Claim Objections

2.   The amendment filed on June 17, 2003 corrected the dependency of Claim 21 as objected

to in paragraph 2 of the last office action, paper number 7. Therefore, the Examiner hereby

withdraws that objection.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making
> and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
> pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
> contemplated by the inventor of carrying out his invention.

4.   Claims 1-5, 7-15, and 34-36 rejected under 35 U.S.C. 112, first paragraph, as containing

subject matter which was not described in the specification in such a way as to enable one skilled

in the art to which it pertains, or with which it is most nearly connected, to make and/or use the

invention. The fourth paragraph of Claim 1 contains the limitation of "in response to detecting

that an aggressor participant's hit or lift trade command would execute a trade in excess of what

the aggressor participant may have intended,". However, the specification does not enable one of

ordinary skill in the art at the time the invention was made to determine how the invention would

be able to determine what *the aggressor participant may have intended*. The specification

contains no reference to the aggressor participant's intentions nor to any artificial intelligence

program which could possibly be used to predict the intentions of a human participant. For

purposes of examination, the Examiner will consider this limitation as meaning that the invention

will ensure that the trade is within the normal preset guidelines, i.e. minimum or maximum bid,

offer, or quantity, such as is standard practice within the industry.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6.   Claims 1-5, 7-18, 20-23, and 34 are rejected under 35 U.S.C. 102(b) as being separately

anticipated by McCausland et al (5,243,331) and Kramer (5,038,284). In order to provide a more

concise action on this application, the Examiner will cite features of the claim followed by citation

of the appropriate passages from each of the two references. However, the Applicant should

consider each reference as a separate and distinct rejection under 35 U.S.C. 102(b).

Claim 1: McCausland and Kramer each disclose a computer trading system, comprising:

a. Workstations with displays for presenting pending market conditions

(McCausland, Figure 2)(Kramer, Figure 3a and col 11, lines 9-12);

b. A server programmed to conduct trading sequences responsive to trade

commands received from the workstation users (McCausland, Figure 1; col 22, lines 43-63; and

col 24, lines 7-67)(Kramer, col 5, lines 23-31 and col 9, lines 42-65); and

c. A state in which the participant is given the chance to amend or cancel the trade

prior to the automatic execution of the trade (McCausland, col 25, lines 8-30)(Kramer, col 12,

lines 51-61).

While neither reference uses the terminology "trade states" to describe various parts of the

computer trading system operation, McCausland discusses that the system can monitor the

scheduling of operations and can "change the operational state of the market memory program 90

according to a predetermined time schedule" (col 10, lines 45-51) and during a fatal error

recovery will "re-build the exact state of the market prior to the fatal error" (col 10, lines 30-44).

McCausland further discloses using a menu program which will display to the user a list of

choices, "and the user is prompted for selection, which will be the next programs to run" (col 11,

lines 64-68). McCausland also discloses that at least some of the data being displayed changes to

a default condition upon the user pressing the Bid, Offer, Hit, or Take keys (col 23, lines 1-5)

with the defaults being unique and different for each of these keys. Kramer discloses that in

response to menu selections (i.e. pressing the Hit key, the Bid key, etc.) certain keys will "light up

to indicate which are appropriate answers to menu questions" (col 4, lines 37-40 and Claim 7).

Therefore, both references disclose "defining the ability of various participants to participate in

said trading activities" which is the Applicant's definition of trade specific states in Claim 1.

Claim 2: McCausland and Kramer each disclose a computer trading system and in Claim 1

above, and further disclose that the system is run using a stored program that controls the trading

(McCausland, col 8, lines 25-57)(Kramer, col 10, line 30 - col 11, line 30).

Claim 3: McCausland and Kramer each disclose a computer trading system as in Claim 1

above, and further disclose the user entering commands such as bids, offer, hits, or lifts

(McCausland, col 22, lines 64-68)(Kramer, col 12, lines 3-37).

Claims 4, 5, and 7: McCausland and Kramer each disclose a computer trading system as in

Claim 1 above, and further disclose the trading states comprising Workup, Workdown, and When

states as defined in the table in Figure 11 (McCausland, col 23, lines 6-68)(Kramer, Figure 2 and

col 6, lines 17-39 and col 12, lines 51-61).

Claims 8: McCausland and Kramer each disclose a computer trading system as in Claim 1

above, and further disclose display a bid side and an offer side or a market (McCausland, col 18,

lines 49-57 and col 20, lines 25-26)(Kramer, Figure 3a and col 12, lines 10-12).

Claim 9: McCausland and Kramer each disclose a computer trading system as in Claim 8

and further disclose displaying information as to the size of uncleared (unreconciled) bids and

offers (McCausland, col 18, lines 49-57)(Kramer, col 12, lines 43-46).

Claims 10-12: McCausland and Kramer each disclose a computer trading system as in

Claim 8 above, and further disclose display a list (queue) of bids and offers showing the

participants, time and size of entry, and price (McCausland, Figures 6-9 and col 18, line 34 - col

22, line 38)(Kramer, Figure 3a; col 12, lines 3-13; and col 20, lines 43-65).

Claim 13: McCausland and Kramer each disclose a computer trading system as in Claim

12 above, and further disclose displaying information regarding the hits or lifts by the participant

(McCausland, col 20, lines 25-26)(Kramer, Figure 3a and col 12, lines 10-12).

Claim 14: McCausland and Kramer each disclose a computer trading system as in Claim 1

above, and further disclose the item being a commodity, security, index, or futures contract

(McCausland, col 1, lines 30-33 and col 4, lines 8-14)(Kramer, col 1, lines 8-52).

Claim 15: McCausland and Kramer each disclose a computer trading system as in Claim 1

above, and further disclose the bids and offers pertain to a futures contract (McCausland, col 14,

lines 19-20)(Kramer, col 1, lines 8-52).

Claim 16: McCausland and Kramer each disclose a computer trading system, comprising:

a. Data processor for providing a trading protocol (McCausland, col 10, lines 45-

51)(Kramer, col 9, lines 42-65);

b. Custom designed keypad with specially assigned keys (McCausland, Figure 3 and col 6, line 42 - col 8, line 23)(Kramer, Figure 3a and col 16, table); and

c. Display for presenting pending bids and offers (McCausland, col 24, lines 2-5)(Kramer, Figure 3a and col 11, lines 9-12).

Claim 17: McCausland and Kramer each disclose a computer trading system as in Claim 16 above and further disclose a Cancel key (McCausland, "reject" col 7, lines 43-47 and col 23, lines 27-29)(Kramer, "NT", col 16, table).

Claim 18: McCausland and Kramer each disclose a computer trading system as in Claim 16 above, and further disclose displaying the price and size of the bids and offers (McCausland, col 18, lines 49-57 and col 20, lines 25-26)(Kramer, Figure 3a and col 12, lines 10-12).

Claim 20: McCausland and Kramer each disclose a computer trading system as in Claim 18 above, and further disclose moving to the When state (waiting) when a non-priority participant enters a hit or lift (entry while unreconciled entries are outstanding)(McCausland, col 9, lines 48-55; col 19, lines 28-38; and col 22, lines 41-62)(Kramer, col 12, lines 51-61).

Claim 21: McCausland and Kramer each disclose a computer trading system as in Claim 16 above, and further disclose presenting (displaying) information based on the current trading state (i.e. bid information is displayed while in the bid state, offer information is displayed while in the offer state, etc.)(McCausland, Figures 6-9 and col 7, lines 7-38)(Kramer, Figure 3a and col 25, lines 9-16).

Claim 22: McCausland and Kramer each disclose a computer trading system as in Claim

16 above, and further disclose the item being a commodity, security, index, or futures contract

(McCausland, col 1, lines 30-33 and col 4, lines 8-14)(Kramer, col 1, lines 8-52).

Claim 23: McCausland and Kramer each disclose a computer trading system as in Claim

16 above, and further disclose the bids and offers pertain to a futures contract (McCausland, col

14, lines 19-20)(Kramer, col 1, lines 8-52).

7.   Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by McCausland et al

(5,243,331).

Claim 19: McCausland discloses a computer trading system as in Claim 16 above, and

further discloses terminating the bid/offer state upon entry of a hit or lift (col 24, lines 64-67).

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

9.   Claims 31-33 and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over

McCausland et al (5,243,331) and Kramer (5,038,284). In order to provide a more concise action

on this application, the Examiner will cite features of the claim followed by citation of the appropriate passages from each of the two references. However, the Applicant should consider each reference as a separate and distinct rejection under 35 U.S.C. 103(a).

Claims 31-33, 35, and 36: McCausland and Kramer each disclose a computer trading system, comprising:

a. Workstations with displays for presenting pending market conditions (McCausland, Figure 2)(Kramer, Figure 3a and col 11, lines 9-12);

b. Central server programmed to conduct trading sequences responsive to trade commands received from the workstation users (McCausland, Figure 1; col 22, lines 43-63; and col 24, lines 7-67)(Kramer, col 5, lines 23-31 and col 9, lines 42-65); and

c. A state in which the participant is given the chance to amend or cancel the trade (McCausland, col 25, lines 8-30)(Kramer, col 12, lines 51-61).

While neither reference uses the terminology "trade states" to describe various parts of the computer trading system operation, McCausland discusses that the system can monitor the scheduling of operations and can "change the operational state of the market memory program 90 according to a predetermined time schedule" (col 10, lines 45-51) and during a fatal error recovery will "re-build the exact state of the market prior to the fatal error" (col 10, lines 30-44). McCausland further discloses using a menu program which will display to the user a list of choices, "and the user is prompted for selection, which will be the next programs to run" (col 11, lines 64-68). McCausland also discloses that at least some of the data being displayed changes to

a default condition upon the user pressing the Bid, Offer, Hit, or Take keys (col 23, lines 1-5) with the defaults being unique and different for each of these keys. Kramer discloses that in response to menu selections (i.e. pressing the Hit key, the Bid key, etc.) certain keys will "light up to indicate which are appropriate answers to menu questions" (col 4, lines 37-40 and Claim 7). Therefore, both references disclose "defining the ability of various participants to participate in said trading activities" which is the Applicant's definition of trade specific states in Claim 1.

While neither reference explicitly discloses enabling the user to exclude or include third party participants from trading with the first participant when completing a trade with the second participant, Official Notice is taken that it is old and well known in the negotiation and auction arts that third party participants can be allowed to participate (included) or prevented from participating (excluded) during the negotiation and consummation of a transaction between the first and second parties. For example, in the normal Dutch (reverse) auction in which a first party is offering a quantity of a product for sale, when a second party enters a bid at a certain price, the auction is stopped while the second party is queried as to the desired quantity of the items. The second party is given a specified amount of time, such as two minutes, in which to consummate the trade. During this time, none of the third parties may enter bids nor participate in the negotiation of the quantity, i.e. they are excluded. However, if the second party does not purchase all of the items, third parties may be allowed to buy the remaining items at the same price as the second party, i.e. they are included (in support of this Official Notice, See Rockoff et al, "Design of an Internet-based System for Remote Dutch Auctions", page 11). McCausland

asks the user to Confirm or Reject the second party's bid/offer (col 20, lines 58-61) and discusses

the differences between a "single-order" trader and a "multi-order" trader (col 22, lines 41-63)

and how partial hits or offers are handled (col 24, line 64 - col 25, line 3). Kramer discusses at

length how two traders resolve conflicts with unreconciled trades through one-on-one negotiation

(col 12, lines 38-61). Therefore, it would have been obvious to one having ordinary skill in the art

at the time the invention was made to allow the user (first party) to include or exclude other

parties when consummating a trade with the second party. One would have been motivated to

allow the user to exclude others in order to prevent a barrage of conflicting bids/offers from

arriving while the user is attempting to complete the transaction with the second party.

Claim 37: Kramer and McCausland each disclose a computer trading system with a

custom designed keyboard as in Claim 16 above, but neither explicitly disclose that the keyboard

would contain a plurality of buy and sell keys with one buy key and one sell key assigned to each

of a plurality of specific securities. However, Kramer discloses using special function keys on the

keyboard to provide simplified data entry and further discloses altering these function keys to

provide the desired functionality (col 3, line 63 - col 4, line 4). McCausland also discloses a

special purpose keypad with a variety of special functions assigned to the function keys. While

one exemplary mapping is disclosed, it is also disclosed that "other mappings of keypad 200 are

possible and are contemplated" (col 6, line 40 - col 8, line 23). Thus, both references disclose that

the keys on the keyboard/keypad may be altered to provide the desired functionality. The

Examiner also notes that it is common for data processing keyboards to have 10-12

programmable function keys. Therefore, it would have been obvious to one having ordinary skill

in the art at the time the invention was made that a plurality of buy and sell keys could be set up,

one pair for each desired security. One would have been motivated to set up special buy and sell

keys for specific securities in order to increase the speed in which the operator could enter

selections as discussed as being desirous by both references.

10.   Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Kramer</u>

(5,038,284) in view of <u>McCausland et al</u> (5,243,331).

        Claim 19: <u>Kramer</u> discloses a computer trading system as in Claim 16 above, but does not

explicitly disclose terminating the bid/offer state upon entry of a hit or lift. However, <u>McCausland</u>

discloses a similar computer trading system in which the bid/offer state is terminated upon entry of

a hit or a lift (col 24, lines 64-67). Therefore, it would have been obvious to terminate the

bid/offer state in <u>Kramer</u> when a hit or lift was entered. One would have been motivated to

terminate the bid/offer state in order to allow the trader to process other actions after the pending

bid/offer had been fulfilled by the hit or lift.

Response to Arguments

11.   Applicant's arguments filed June 17, 2003 have been fully considered but they are not

persuasive.

A. The Applicant argues that the Examiner has not taken into account all the claim language citing the language in Claim 1 as an example. The Examiner notes that the functionality of the claim has been addressed. The claim cites a control logic, i.e. computer program, which executes trade commands in a predefined way according to the "state" of the trading activity. The references disclose computer systems which have been programmed to execute trades. It is inherent that the computer program follows the predefined steps (way) of the program and that it would transition from one "state" to the next in accordance with the predefined steps as normally shown in a state diagram within object oriented programming.

B. The Applicant argues that Kramer does not disclose a trading system, but merely a system for processing data concerning trades made outside of the system. The Examiner notes that Kramer explicitly discloses the steps a trader goes through including how to start up the remote device, how to make trades using the remote device, and how to submit the end of day reports using the remote device (col 11, line 38 - col 12, line 37). Thus, the reference is clearly a trading system.

C. The Applicant argues in reference to Claim 16-18, 20-23, and 37 that McCausland and Kramer do not disclose that the custom designed keypad include keys that are assigned to a particular security. This has been addressed in the rejection above. McCausland's disclosure that many different mappings of keys to function can be made renders it a design decision by the user on how to program (map) each key. Likewise, Kramer explicitly discloses that the user can program the function keys to perform specific functions. Programming such special function keys

to allow a one button purchase or selection is rampant throughout society. For example, most

fast food restaurant cash registers have large keypads with separate buttons for each of their

products. The salesperson only has to press a single button in order to indicate a purchase of that

product. In each case, the manager has the option to (re)program the buttons to the desired

function. Both references disclose similar reprogrammable keys on their keyboards. As noted

above, it would be a design decision of the user on how the various keys would be programmed.

If the user consistently needs to access a few specific commodities, it is obvious that the user

would program keys for those commodities. If, on the other hand, the user was a "generalist" and

covered dozens or hundreds of commodities with similar frequency, then the user may want to

program the keys to perform other frequently used functions instead. Again, this is a design

decision that does not affect the steps of the claimed method of trading.

D. The Applicant argues in reference to Claims 31-33 that there is no Second Look State

nor related functionality in the claims. The Examiner has removed the phrase "Second Look

State" from the rejection as per the Applicant's removal of the same phrase from the amended

claims. However, both references still disclose giving the user a chance to refuse or proceed with

the trade, i.e. cancel, modify, or approve the trade, within a specified time limit.

E. The Applicant attempted to traverse the Official Notice taken in the previous Office

Action pertaining to Dutch Auctions and the exclusion of third parties while a trade is

consummated, and requested a reference in support of the Official Notice. While the arguments

are not persuasive, a reference describing Dutch Auction methods are been provided.

Furthermore, in response to the Applicant's argument that it would not have been obvious to

combine the cited trading systems with the Dutch Auction feature, the Examiner notes that in both

cases an agreed upon transaction (trade) is being consumated, and it would have been obvious to

"stop" the trading (offers/bids) until the current trade had been completed. If in either instance

the user continued to receive additional offers/bids, given the relatively small display screens being

used, it would have been difficult if not impossible for the user to finish any trade/auction.

F. The Applicant's arguments in reference to Claim 19 have been addressed above.

Conclusion

12.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office

action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is

reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR

1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the date of this final
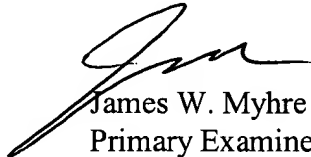
action.

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Exr. James W. Myhre whose telephone number is (703) 308-7843. The

examiner can normally be reached on weekdays from 6:30 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Eric Stamber, can be reached on (703) 305-8469. The fax phone number for Formal

or Official faxes to Technology Center 3600 is (703) 872-9306. Draft or Informal faxes may be

submitted to (703) 872-9327 or directly to the examiner at (703) 746-5544.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Group Receptionist whose telephone number is (703) 308-1113.

JWM
September 24, 2003

James W. Myhre
Primary Examiner
Art Unit 3622